Tenure Strategies

or

How to survive the first six years of academic life

David Wood
Associate Professor
Computer Sciences Department
University of Wisconsin
Caveat

• From a recently tenured (Fall ‘95) faculty member’s perspective

• My opinions, based on my experience at Wisconsin

• Some fields work differently from others

• Some universities work differently from others
  • especially smaller teaching colleges
Outline

• Tenure process

• Tenure metrics
  • What are they looking for?
  • What really matters?

• General tenure strategies
  • The lone wolf
  • The random collaborator
  • The empire builder
  • The team builder

• What worked for me

• A few words of advice
Tenure Process

- Department executive committee
  - Annual reappointment reviews
  - Mid-course evaluation (typically 3rd or 4th year)
  - Promotion and tenure review in sixth year
    - Based on dossier and external letters
- Divisional committee (advisory at Wisconsin)
- Dean
- University committee (not Wisconsin)
- Provost, President, Chancellor
- Regents
Tenure Metrics

• Research ➔ Extremely important
• Teaching ➔ Moderately important
• Service ➔ Somewhat important
• Extension/Outreach ➔ Not important

Wisconsin’s priorities

Find out priorities at your university and your department
The Research Metric

IMPACT!

• Change the way people do things in your field
  - the way people think
  - the methods they use
  - directions of others future research

• Influence on relevant industry
Measures of research impact

- Letters of evaluation
  - External reviewers
  - Generally senior members in your field
  - Need to identify specific individual contributions

- Number of high-quality publications
  - Journals
  - Highly-reviewed conferences

- Extramural funding
  - Sufficient to support research program
  - Evidence of fund-raising proficiency
  - Evidence of success in competitive peer-review process

Need to identify your specific individual contributions
Service Metrics

- Editorships
- Program committees
- Panels
- Reviewing
- Consulting
- University/College/Department committees

Measure of respect by your peers
Teaching Metrics

• Teaching evaluations
  question #8: “Would you recommend the instructor?”

• Teaching awards

• Teaching undergraduates

• Course development

• Supporting letters from students

My opinion: Can hurt you, but is unlikely to help much
General Research Strategies

• The lone wolf
• The random collaborator
• The empire builder
• The team builder
The Lone Wolf

• Performs research primarily by his/her self
  • Small single investigator grants
  • Works with small group of students/postdocs

• Pros
  + Little difficulty identifying who made contributions
  + Get all the credit

• Cons
  - Generally limited to smaller research topics/ideas
  - Little leverage; must do most work oneself
  - No feedback from senior/peer collaborators
  - Probably limited impact
The Random Collaborator

• Sequentially collaborate with many different colleagues
  • Small single investigator grants
  • Small team of students/postdocs

• Pros
  + Potential for significantly greater impact
  + Leverage colleagues’ expertise
  + Substantial feedback from senior/peer collaborators

• Cons
  - Some difficulty distributing credit
  - Still limited to smaller scale research topics/ideas
The Empire Builder

• Develop and head large research group
  • Larger single investigator grants
  • Large team of students/postdocs/research staff

• Pros
  + Potential for significantly greater impact
  + Leverage larger team
  + Little difficulty distributing credit

• Cons
  - Tremendous amount of management work
  - Requires superior fund raising skills
  - Little feedback from senior/peer collaborators
  - Long startup time
The Team Builder

- Develop collaborative research team
  - Multiple faculty investigators
  - Larger multi-investigator grants
  - Large team of students/postdocs/research staff

- Pros
  + Potential for significantly greater impact
  + Leverage expertise of collaborators
  + Tackle larger research topics/ideas

- Cons
  - Significant management effort (but less than Empire Builder’s)
  - Requires better than average fund raising skills
  - Some difficulty identifying individual contributions
My Tenure Experience

- Came to UW in Winter of 1990

- Struggled for first several years
  - Tried the Random Collaborator model
  - One paper in first 2 years

- Switched to the Team Builder model in 1992-1993
  - Joined with two colleagues
  - Formed the “Wisconsin Wind Tunnel” project
  - Received significant funding from NSF and ARPA
  - Published 6 journal and 14 highly reviewed conference papers
  - Additional collaboration with companies and universities

- Granted tenure in Fall ‘95
Issues in my Tenure Case

• Extensive collaboration
  • Most papers and both big grants were with two collaborators
  • I was most junior of the three

  Worked hard to differentiate myself

• Limited teaching of undergraduates
  • Had only taught one undergraduate course
Some Advice

• Pick “real” problems!
  • solve problems someone cares about
  • don’t invent a new field

• Strive for multi-investigator multi-disciplinary projects
  • makes it easier to solve real problems

• Match the strengths and weaknesses of your local environment

• Make sure that you are excited enough to work on it for 3-5 years

* Adapted from David Patterson’s “How to have a Bad Career in Research/Academia”
More Advice *

• Get lots of feedback
  • Send papers out for “pre-review” to your peers
  • Have periodic external project reviews
    - WWT: 2 times per year, 2 days with external visitors

• Work on Technology Transfer
  • Sell your wares in the Marketplace of Ideas
  • Give plenty of talks at universities and companies
  • Get to know, and impress, the big names in your field

• Host department colloquium in your fifth year
  • Invite likely letter writers

• Take the “Tenure Tour”
  • Give talks at likely letter writers’ universities your fifth year

* Adapted from Mary Jane Irwin’s “The Tenure Process”
Conclusion

• Goal is to have impact: Change way people do research in your field

• Do “real stuff”
  - Make sure you are solving problems someone cares about

• Feedback is key
  - Seek out and value critics

• Don’t be afraid to change course mid-stream
  - Better to adapt than to be wrong

• Differentiate your contributions
  - But not at the expense of having high impact

• Have fun
  - This is what you will be doing for the rest of your life